

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of constructing home-state information in a home network, comprising:

a) by a home agent of a network device, constructing a home-state set using a plurality of home-state information sources which expresses the home-state information sources and all the combinations of the home-state information sources;

b) constructing home-state objects which are specific instances of the home-state set; and

c) constructing home-state properties expressing properties of the home-state objects which specify characteristic parts of home-state information sources,

wherein the constructed home-state set, home-state objects, and home-state properties comprise the constructed home-state information,

wherein the home-state set comprises common profiles of each of the home-state information sources, each of the common profiles including characteristics common to all of the home-state information sources and a value for each characteristic that is unique to the home-state information source, and

wherein operation a) comprises a1) constructing unique profiles of home-state information sources, each of the unique profiles including characteristics of a home-state information source that are not common to all of the home-state information sources and a value for each characteristic that is unique to the home-state information source.

2-3. (canceled).

4. (currently amended): The home-state information constructing method according to claim ~~[[3]]~~1, wherein operation a1) comprises, constructing home device profiles and constructing external home service profiles.

5. (currently amended): The home-state information constructing method according to claim ~~[[2]]~~1, further comprising setting rules for information source objects which form profiles of the home-state information sources and a combination thereof, the rules being applied to a specific home-state object.

6. (original): The home-state information constructing method according to claim 5, wherein the rules are personally defined by a home user.

7. (original): The home-state information constructing method according to claim 5, wherein the rules are provided from an external home service provider.

8. (original): The home-state information constructing method according to claim 1, further comprising combining a user interface with the home-state information to show the home-state set, the home-state objects and the home-state properties to a user.

9. (original): The home-state information constructing method according to claim 8, further comprising combining an Application Programming Interface (API) with the home-state

information to enable the constructed home-state information to be accessed from an external application.

10-13. (canceled).

14. (currently amended): A method of utilizing home-state information, comprising:
collecting information from home-state information sources on a home network through
an information collecting module in a home agent;

processing the collected information to generate home-state information including a
home-state set expressing all combinations of the various information sources in the network;

analyzing the generated home-state information to produce an event which specifies the
generated home-state information;

announcing the event outside the home network; and

storing the generated home-state information in a computer-readable memory,

wherein the home-state set comprises common profiles of each of the home-state
information sources, each of the common profiles including characteristics common to all of the
home-state information sources and a value for each characteristic that is unique to the home-
state information source, and

wherein the home-state set comprises unique profiles of the home-state information
sources, each of the unique profiles including characteristics of a home-state information source
that are not common to all of the home-state information sources and a value for each
characteristic that is unique to the home-state information source.

15. (original): The home-state information utilizing method according to claim 14, further comprising announcing an event outside of a home by analyzing the home-state information.

16. (currently amended): A system for utilizing home-state information, comprising:
an information collecting module operable to collect information from various
information sources in a network;

a home-state generating module operable to process the collected information to generate home-state information including a home-state set expressing all combinations of the various information sources in the network;

a home-state analyzing module operable to analyze the generated home-state information depending on home-state properties to produce analyzed information;

a home-state storing module operable to store the information generated by the home-state generating module and information analyzed by the home-state analyzing module in a computer readable-memory;

one or more applications in a computer-readable memory operable to control a predetermined home device using the generated home-state information or the analyzed information; and

an Application Programming Interface (API) operable to transmit the information generated by the home-state generating module and the information analyzed by the home-state analyzing module to the applications,

wherein the home-state storing module stores a set of information sources and the combinations of the information sources,

wherein the home-state set comprises common profiles of each of the information sources, each of the common profiles including characteristics common to all of the information sources and a value for each characteristic that is unique to the information source, and

wherein the home-state set comprises unique profiles of the information sources, each of the unique profiles including characteristics of an information source that are not common to all of the information sources and a value for each characteristic that is unique to the information source.

17. (original): The home-state information utilizing system according to claim 16, wherein the one or more applications are constructed so that transmission or reception of home-state information therebetween is performed using Meta data for the information generated by the home-state generating module and the information analyzed by the home-state analyzing module.

18. (previously presented): The home-state information constructing method according to claim 1, wherein the home-state information sources include home devices, a home agent, home users, home services, and home applications.